Use of Web 2.0 Technologies for Public Outreach on a Simulated Mars Mission

Brian Shiro¹, Joseph Palaia², and Kristine Ferrone³

1. NOAA and University of North Dakota, 2. 4Frontiers Corporation, 3. NASA and University of Houston

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Summary

Recent advances in social media and internet communications have revolutionized the ways people interact and disseminate information. Astronauts are already taking advantage of these tools by blogging and tweeting from space, and almost all NASA missions now have presences on the major social networking sites. One priority for future human explorers on Mars will be communicating their experiences to the people back on Earth.

During July 2009, a 6-member crew of volunteers carried out a simulated Mars mission at the Flashline Mars Arctic Research Station (FMARS). The Mars Society built the mock Mars habitat in 2000-01 to help develop key knowledge and inspire the public for human Mars exploration. It is located on Devon Island about 1600 km from the North Pole within the Arctic Circle. The structure is situated on the rim of Haughton Crater in an environment geologically and biologically analogous to Mars.





Living in a habitat, conducting EVAs wearing spacesuits, and observing communication delays with "Earth," the crew endured restrictions similar to those that will be faced by future human Mars explorers. Throughout the expedition, crewmembers posted daily blog entries, reports, photos, videos, and updates to their website and social media out lets Twitter, Facebook, YouTube, and Picasa Web Albums. During the sixteen EVAs of their field science research campaign, FMARS crewmembers collected GPS track information and took geotagged photos using GPS-enabled cameras. They combined their traverse GPS tracks with photo location information into KML/KMZ files that website visitors can view in Google Earth.





twitter

facebook

You Tube

Broadcast Yourself"

Blogger



Live Webcasts

Although the crew observed a strict 20-minute communication delay with "Earth" to simulate a real Mars mission, they broke this rule to conduct four successful live webcasts with student groups to provide them a glimpse of life on "Mars." These sessions included the SMU Talented & Gifted Program, NASA Kennedy Space Center Interns, NASA Digital Learning Network via Georgia Tech, and Gardendale Magnet Elementary School in Florida. The Omega Envoy rover also broadcast te-NASA Digital Learning Network " | wilden lemetry live from FMARS on Devon Island.







SMU Talented & Gifted Program

Selected Tweets @FMARS2009Crew

visites websites with FMARS come on Thursday, July 23 of 10, 34 am EDC on the NASA

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